

Southeastern States Asbestos Conference (SESAC) 2004

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Questions and Answers

Q: Is the temporary removal of load-supporting structural members to add or remove pieces of equipment considered a demolition or a renovation?

A: EPA considers the temporary removal of load-supporting structural members to add or remove pieces of equipment to be renovations. Even though these removals involve the wrecking or removal of a load-supporting structural member, the intent is not to destroy the facility or facility member but to alter it or resupport it. As renovations, these removals are only subject to the notification and work practice provisions of the Asbestos NESHAP if threshold amounts of asbestos are involved in these renovations.

Examples of activities that would be considered renovations even though the removals involve the removal or alteration of a load-supporting structural member include the following: the cutting of an outside load-bearing wall for installation of a new door; the replacement of a rotted support column; the cutting of a hole in a structural member to allow for a passage of a pipe; and the cutting of metal cross beams or vertical load-supporting structural members to allow the removal and replacement of equipment.

For removals where the intent is to destroy the facility or facility member, these removals would be considered demolitions. All demolitions are subject to the ten-day notification requirements regardless of the amount of asbestos involved.

Q: Do the regulatory requirements contained in the Asbestos NESHAP apply to the renovation of a house for the purpose of converting the house into a commercial establishment?

A: A single, residential house containing four or fewer dwelling units is not a regulated "facility" under the Asbestos NESHAP. Since it is not a regulated facility, the house is exempt from the Asbestos NESHAP requirements. It does not matter if the house will be used for commercial purposes at some time in the future. The residential exemption does not apply, however, if the house was ever used for commercial purposes in the past. Once the house is utilized for commercial purposes, the residential exemption is lost forever. In these instances where the residential exemption does not apply, the requirements of the Asbestos NESHAP are applicable.

The residential building exemption would not apply when multiple (more than one) small, residential buildings on the same site are renovated or demolished by the same owner or operator as a part of the same project (example: an urban renewal project in which two or more houses on the same block are to be demolished). The exemption also would not apply when a single, residential building is demolished or renovated as a part of a larger project that includes the renovation or demolition of a regulated facility or regulated facilities (nonresidential building(s) or residential building(s) having more than four dwelling units in a building). In these instances, the requirements of the Asbestos NESHAP are applicable.

Q: When determining if threshold amounts are met for transite removal, do you look at the amount actually cut or rendered friable, or do you look at the amount to be removed by methods of removal that **could** render it friable? How do you establish if threshold amounts were removed after the fact - can a certain debris amount be used to establish that regulated amounts were involved? Since you have to notify for all demolitions at regulated facilities, are the threshold amounts for transite removal based on the probability of removal or demolition techniques rendering the material RACM? Under which scenarios would a dry removal be acceptable? Is there any guidance on transite removal similar to the roofing guidance?

A: If transite is to be removed in excess of the threshold amounts contained in 40 C.F.R. Section 61.145, the removal could be subject to the requirements of the Asbestos NESHAP. Transite is a Category II nonfriable asbestos-containing material (ACM). Under the Asbestos NESHAP, regulated ACM (RACM) includes "...Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations..." Therefore, if a threshold amount of transite is removed **very, very** carefully (i.e., nails are pulled out; screws are unscrewed, and the transite is brought down carefully from the walls so it doesn't crumble into pieces), the removal would not be subject to the Asbestos NESHAP since the removal techniques would not have a high probability of rendering the transite friable. Alternatively, if the threshold amount of transite is to be subject to removal techniques that have a high probability of rendering it friable, the entire removal is subject to Asbestos NESHAP requirements. In order for an inspector to determine that a violation of the Asbestos NESHAP had occurred, the inspector would not need to observe a threshold amount of transite that actually had been rendered friable. If the threshold amount is to be subjected to conditions that will make it friable and less than a threshold amount has been made friable at the time of inspection, the whole removal amount is subject to the Asbestos NESHAP.

It may be difficult to determine if a threshold amount of transite was involved in a renovation or demolition by noting the debris amount after the fact. Although the 35 cubic feet might be able to apply to the debris amount removed from facility components, it would be more appropriate to determine if a threshold amount of transite was involved by establishing a picture of the facility prior to demolition or renovation activities with a reasonable method to determine the amount of transite involved. For example, when documenting Asbestos NESHAP violations, an architect's plan or other building schematics that identify how much transite was used in construction together with leftover transite debris in excess of 1% asbestos could be used to verify that a threshold amount was involved.

All demolitions require notification. Notifications must include an estimate of the amount of RACM to be removed from the facility and an estimate of the amounts of Category I and Category II nonfriable ACM that will not be removed before demolition. However, even if threshold amounts are met, 40 C.F.R. Section 61.145(b)(4)(vi) does not require that an estimate of the amounts of Category I and Category II nonfriable ACM to be removed from a facility prior to demolition be provided in the notification if these materials are not to be rendered RACM by removal or demolition techniques. The demolition notification does provide the inspector with an opportunity to inspect to determine that Category I and Category II nonfriable

ACM are handled in accordance with the Asbestos NESHAP.

The dry removal of Category I and Category II nonfriable ACM is allowed in situations where the materials are not to be rendered RACM. In such instances, Asbestos NESHAP work practice requirements, including wetting, would not be applicable. Also, 40 C.F.R. Section 61.145(c)(7) allows for dry removals during freezing temperatures below 32 F. Exceptions to the wetting requirements are also allowed pursuant to 40 C.F.R. Section 61.145(c)(3)(i)(A) for renovations with prior Administrator approval.

There is no EPA policy which exists specifically applicable to the removal of transite. Subsequent to the publication of the Asbestos NESHAP, roofing industry representatives met with EPA to establish guidance applicable to the removal of roofing materials. EPA has not been requested to provide similar guidance applicable to the removal of any other particular ACM.

Q: If company B takes asbestos-containing waste material (ACWM) from different sources including company A before compacting the combined ACWM from the various sources and sending the waste to company C for disposal, how should waste shipment records (WSRs) be handled? Could company B consider itself the waste generator of the combined ACWM shipment and send the combined ACWM for disposal with one WSR for the combined waste?

A: For purposes of compliance with the Asbestos NESHAP, all original WSRs from company A and from the other sources giving waste to company B should accompany the combined waste shipment to the final disposal site. For example, if three separate ACWM shipments are combined before they are transported to the disposal site, the separate WSRs for each of the three shipments must accompany the combined shipment until final disposal. Disposal site operators should verify amounts of disposed ACWM to the best of their ability although EPA realizes that verifying waste volumes may be difficult due to the volume reduction caused by the compacting of the ACWM. Even though one shipping paper for the combined waste may be satisfactory for Department of Transportation (DOT) regulatory purposes, such is not true for the purpose of complying with the Asbestos NESHAP.

Q: Are the notification requirements contained in 40 C.F.R. Section 61.145(b) applicable to the removal of Category I nonfriable asbestos-containing material (ACM) that is in good condition and that has not become regulated asbestos-containing material (RACM).

A: The notification requirements contained in 40 C.F.R. Section 61.145(b) are applicable to renovations involving the specified threshold amounts of RACM. Category I nonfriable asbestos-containing materials (packings, gaskets, resilient floor coverings and mastic, and asphaltic roofing materials) are considered RACM only when: (1) they will be or have been subjected to sanding, grinding, cutting, or abrading; (2) they are in poor condition and hence friable; or (3) they are located in a structure to be demolished by burning.

Under most common removal scenarios identified in EPA's *A Guide to Normal Demolition Practices Under the Asbestos NESHAP*, resilient floor tile should not be rendered friable if it was in good condition before the renovation. Some removal techniques which would

not render the tile to be friable include the use of solvents or water in conjunction with long-handled scrapers or gas- or electrically-powered mechanical chisels, dry ice, and infrared machines. If the tiles are extensively damaged prior to removal, the aforementioned removal techniques could render the floor tile to be RACM. Furthermore, any removal method that will cut, grind, sand or abrade the tile as described in 40 C.F.R. § 61.141 will cause the tile to become RACM. Also, pulling the VAT off of the floor, if still attached to the subfloor by mastic, may tear VAT making it become RACM.

In summary, the applicability of the Asbestos NESHAP to the removal of Category I nonfriable asbestos-containing materials (ACMs) depends on the following: (1) the condition of the material at the time of renovation, (2) the nature of the operation to which the material will be subjected, and (3) the amount of ACM involved. The notification requirements contained in 40 C.F.R. § 61.145(b) are only applicable to renovations involving threshold amounts of VAT when such VAT is considered to be RACM, or considered to be friable, or considered to be rendered RACM by the removal procedures being employed. An inspector would have to be on-site to examine the debris to determine if the method used to remove the floor tile rendered it friable.

EPA realizes that without being provided with a notification, an inspector is often unable to observe the floor tile removal. Thus, the inspector has no opportunity to determine the condition of the tile and to confirm that the floor tile removal is being handled properly. A state or local regulatory agency could adopt notification regulations with more stringent requirements than the Asbestos NESHAP. Such regulations could require notification for every VAT removal in order to provide inspectors with an opportunity to inspect each removal.

A statement published in the preamble to the November 20, 1990, Asbestos NESHAP Revision published at 55 Federal Register 48406 states, "This policy determination stated in essence that any ACM, whether originally friable or nonfriable that become (or are likely to become) crumbled, pulverized, or reduced to powder are covered by the NESHAP." This statement should not be used as a basis for regulators to regulate resilient floor tile removals. Further down on the final column of page 48408, the following statement is made:

A statement in the determination to the effect that some nonfriable materials may \ remain nonfriable throughout demolition and renovation is evidence that this determination was intended to be narrowly interpreted and not used to require removal of all nonfriable materials. For example, materials such as resilient floor covering, asphalt roofing products, packings, and gaskets would rarely, if ever, need to be removed because, even when broken or damaged, they would not release significant amounts of asbestos fibers.

This statement demonstrates that EPA did not intend to regulate the removal of nonfriable VAT under the Asbestos NESHAP. EPA believes that the aforementioned removal techniques do not render the VAT "likely to become" friable

Q: Are billboards and piers considered to be facilities under the Asbestos NESHAP thus

requiring inspections and notifications prior to renovation or demolition?

A: The Asbestos NESHAP defines “facility” as “any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site.” Some items could be considered to be commercial or public structures. Although “structure” is not defined in the Asbestos NESHAP, “structural member” is defined as “any load-supporting member of a facility, such as beams and load-supporting walls; or any nonload-supporting member, such as ceilings and nonload-supporting walls.” Billboards and piers could be considered to be structures. Other items that could be considered to be structures include bridges, utility towers and lines, pools, water basins, and agricultural bins and tanks.

Some items could be regulated under the Asbestos NESHAP as facility components. A “facility component” is defined as “any part of a facility including equipment.” A “facility component” includes any item that potentially contains or is covered with or coated with asbestos. A “facility component” should be located on contiguous, attached or adjacent facility property. Items such as roadways, parking lots, and fences could be considered to be facility components.

Many of the aforementioned items would not usually contain asbestos or may not contain RACM meeting threshold amounts for renovation and pre-demolition removals. Notification would be required for the demolition of the aforementioned items.

Q: If a contractor performs polarized light microscopy (PLM) with point counting and determines that no ACM is present in a removal and a regulatory agency finds ACM utilizing transmission electron microscopy (TEM), can the regulatory agency allege violations of the Asbestos NESHAP?

A: The Asbestos NESHAP states that polarized light microscopy (PLM) or PLM with point counting is to be utilized to analyze the asbestos content of a sample. An owner or operator of a demolition or renovation activity is not required by the Asbestos NESHAP to collect samples. However, the owner or operator is required pursuant to 40 C.F.R. § 61.145(a) to “... thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM.” A regulated agency can allege notification and work practice violations under the Asbestos NESHAP based on TEM sample analyses. Although a contractor is not required to perform TEM analyses, he is required to perform a thorough inspection pursuant to 40 C.F.R. § 61.145(a). This thorough inspection should include a number of samples sufficient to determine the presence and extent of asbestos contamination (although sampling is **not** specifically required by the Asbestos NESHAP). The fact that a regulatory agency finds asbestos that the contractor did not discover (regardless of the sample analyses procedures utilized) can be indicative of the contractor’s failure to perform a thorough inspection. If the contractor had performed a thorough inspection as required, he should have discovered the ACM discovered by the regulatory agency. The regulatory agency could also allege other Asbestos NESHAP violations including

notification and work practice violations as applicable. The contractor would have known that he needed to comply with specific Asbestos NESHAP requirements if he had performed the thorough inspection.

Q: Are any facilities approved pursuant to 40 C.F.R. § 61.155 in Region 4 for converting ACM into non-ACM?

A: Currently, no process approved under 40 C.F.R. § 61.155 is operating in the Region. If a facility could prove its process does convert ACM into non-ACM, it would have to apply pursuant to § 61.155 with a demonstration submission before EPA would allow it. Such approvals are not quick. It took EPA almost a year of review time to approve the two processes approved for ACM conversion in the country, plus whatever time it took the facilities to gather data before submitting it to EPA.

Q: How is the demolition of a ship covered under the asbestos NESHAP?

A: A ship is defined as a facility under the Asbestos NESHAP. Sinking a ship by setting controlled charges in the hull is considered a demolition. In order to sink a ship, some event has to occur to make a load-supporting structural member no longer capable of supporting the load of the facility (in this case, the ship).

Q: If sinking a ship is considered a demolition, what material must be removed from the ship prior to its demolition?

A: The owner/operator would need to remove the RACM from the ship that will be or may be disturbed. This includes friable material and nonfriable material that may have a high probability of becoming regulated during or after the demolition. All friable ACM that are loose, detached or disturbed (i.e., deteriorated or damaged) shall be removed from the vessel and disposed of appropriately or repaired in place by encapsulation (or other method) such that it can not be released into the environment.

Certain ACM may be left in place during the demolition. Non-friable ACM may be left in place unless loose or otherwise disturbed. For example, gaskets may generally be left in place. Additionally, friable material on a component that is encased in concrete or other similarly hard material may also be left in place. For example, asbestos in the bulkheads would be allowed to remain in place as long as the bulkheads are not “wrecked” thus exposing the asbestos during the demolition. It is unlikely that this material would be released into the environment. Pipe lagging that is wrapped in cloth or tin would not be an example of encased material. Any encased asbestos that will be exposed by any of the demolition activities would need to be removed prior to demolition. Category II ACM may or may not be left in place. This decision would need to be made on a case-by-case basis.

In summary, materials that will be disturbed by actions relating to the demolition, or materials that are likely to fall off of ship components during the demolition or as a result of environmental forces after the demolition must be removed prior to the sinking of the ship. Materials that are not likely to degrade significantly, including encased materials, may remain in

place.

Q: What updates to regulatory guidance are in the works?

A: The purple book, Guidance for Controlling Asbestos-Containing Materials in Buildings is in final review after its recent update. It may be available first on line and then in printed form by the early part of next year. The book The ABCs of Asbestos in Schools has been updated. The Spanish version is now on EPA's asbestos website. The Catastrophic Guide may be updated as early as the spring of 2005.